THE INFLUENCE OF COMPUTER ANXIETY AND COMPUTER ATTITUDE TO THE END USER COMPUTING SKILL

(Study on Perum Perhutani Unit II KPH Pasuruan, Malang)

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Abstract

The result can be seen that computer anxiety in fear variable didn't significantly influence to the end user computing skill at PSDH (Pengolahan Sumber Daya hutan) in the Perum Perhutani unit II KPH Pasuruan, Malang, with a significance level is 0,439>0,05 and anticipation variable contained in computer anxiety has a influence significantly to the end user computing with a significance level is 0,018<0,05. Pessimism variable contained in Computer attitudes didn't has influence significantly, with significance level is 0,427>0,05. and Optimism variable didn't has influence significantly with significance level 0,206>0,05. While determining the coefficient for 0,248 which means that 24,8% use the computer skill are influenced by computer anxiety (Fear and Anticipation variable) and Computer Attitude (Pessimism and Optimism Variable), The remaining 75,2% is determined by other factors.

Keyword: *Computer Anxiety, Computer Attitude, End User Computing Skill*

INTRODUCTION

In the globalization era, many people need fast, precise and accurate information. To obtain the necessary information had needed a sophisticated information technology. The information providers have been developed of information technology continuously. Definition of information technology is a technology which could be used to store, manage, generate and disseminate the information. One of the real of the implementation of information technology is the use of computer technology. Information processing shouldn't base on the actual use of computers, but in this modern era that high competition, the use of computers is very influential in getting the accurate information. The role of computers in today's world is very large if we can actual use it exactly as what needed. For companies and organizations that want to engage in a business competition. If not using computer technology, while others use it then the company will be left behind and unable to compete, this cans high impacts the business life cycle.

The importance of mastery to computer technology in the business world, each manager emphasizes the importance of computer use and software that can assist with their work, so as to improve the quality of future work. As stated by McLeod (2001:30) in the computer field, competitive advantage refers to use of information to gain leverage in the market. So the company does not have to fully rely on physical resources otherwise superior conceptual resources-data and information can be used equally well. This is done by integrating all the information concerning the work undertaken via computer and networks. Success in the use of computers is strongly influenced by employee attitudes toward computer.

The various attitudes that shown by the individual to the presence of computers in their world, it's called as the computer attitude. Computer attitude show a person's reactions or judgments to the computer that based on the pleasure or displeasure to the computer. Attitude is a reaction or response from someone that closed to a stimulus or object. User attitudes are factors which affect the individual performance (skill) in the use a computers. Attitudes also clearly show connotations of correspondence reactions to specific stimuli in everyday life are an emotional reaction to the social stimuli.

In facing to the new developments in information technology, someone can interpret the presence of computer in different ways and sometimes could rejection. This is may be caused by simple ignorance to the computer or it caused by anxiety or fear to the computer technology, is often referred as "Computer Phobia". Because new changes sometimes can be make pressure, there is can arise in the form of anxiety, but there is also a deal with the new challenge that must be faced. Computer attitudes are often analyzed from the perspective of gender differences in computing".

Type of stress is related with negative beliefs about computers, problems in using a computer or a rejection of the computer. Some people feel worry and fear with a computer because they have not enough mastery of the computer technology, so they can't get the benefit from the presence of computers, while most people feel the need to anticipate to the computer. Characteristic of Anxiety have marked a sense of fear and prudence or alertness was not clear and unpleasant. Fear and anxiety are two emotions that functions as a sign of there is danger. According to Oye, N.D. et al, (2012: 213) **"**Computer anxiety is also considered as the tendency of a person to experience a level of uneasiness over his/her impending use of a computer"

The role of EUC can't separate from use of human resources in order to keep the globalization era. According to problem, each company always need the employees who can and have high skills in using the computer so that when doing a job will be completed and the result would be satisfactory. According to McLeod (2001:19) concept of EUC does not mean that the information specialists is not otherwise, the specialists will often perform of consulting role than before. So users or employees who are active in learning or developing expertise in a computer, it would be easy to keep track of technology.

LITERATURE REVIEW

System

According to McLeod (2001:11) "System is a group of elements that are integrated with the common purpose to achieve a goal" and according to Hardcastle (2011:8) "System can be defined as a collection of component that works together toward common goals". It can be concluded that the system is a set of components that are interconnected and integrated to achieve a common goal.

The information system is a component of people, hardware, software, communication network and to produce the information for support manager or people to make decision making, According to O'Brien (2003:10) "Information System that expresses a fundamental conceptual framework for the major component and activities of information system. An information System depends on the resources of people (end user and IS specialist), hardware (machine and media), software (program and procedures), data (data and knowledge base) and network (communication media and network support) to perform input, processing, output, storage and control activities that convert data resources into information product.

Computer-Based Information System

According to Turban and Rainer (2006:31) "CBIS is an information system that using computer technology to perform some or all of the work presented", This system can a PC or software and also include a thousand computers of various sizes with hundreds of printer, plotter and other equipment, databases, and communications networks. So it can be concluded, that CBIS is the information resources of a company, the users and management that run where the role of the computer is needed.

Computer Anxiety

Anxiety is a physiological state that is portrayed by cognitive, somatic, emotional, and behavioral components and that creates feelings of nervousness, fear, worry, or apprehension (Embi, 2007:10), in the research of Embi The most common types of anxiety are generalized anxiety disorder, panic disorder, social anxiety disorder, phobias, obsessive-compulsive disorder, and post-traumatic stress disorder. It can be concluded, anxiety is a psychological felt by humans will perceptions of unpleasant feelings that are not brave and not be able rationally.

The Research from Rahmawati and Djamaluddin (2009:80) "Fear Someone feels afraid to the computer because they haven't mastering to the computer technology and they don't get benefit from the computers. Someone who scares to the computer because they don't know to control the

computer technology, Anticipation Someone needs to anticipate to the anxiety that comes with the computer. Anticipation can be done applying the ideas of fun learning to the computer, the person need to anticipate to the anxiety that comes with the computer". The opinion of some experts on computer anxiety, it can be concluded is the extent to fear of person with the interaction to the computer or inconvenience some people when using the computer.

Computer attitude

Computer attitude is a person's reaction or judgments to the computer by the pleasure (Optimism) or displeasure (Pessimism) to the computer or the general attitude suggests a feeling of pleasure or displeasure to the stimulus object and according to Voogt and Knezek (2008:384) "computer attitudes are often analyzed from the perspective of gender differences in computing".

Variety of attitudes to the presence of computers in their world, there are two attitudes shown in the face of a person who was also present in computer research Optimism someone will appear to the computer, they feel if the presence of computers could help to the job and provide a variety of benefits. They believe that the presence of computers in human life, efficiency in work would be achieved. Pessimism someone would appear to the computer when they assume the presence of a computer will control and dominate to human life. They believe if the computers in the lives of human activity will be replaced by computer technology, so there will be a feeling intimidated. Ultimately a perception if the computer is a tool that will control and dominate to human life, and taking human life into an era intimidated by the presence of computer.

End User Computing

The role of human resources is very importance in the provision of computer information system. Definition End user Computing by McLeod (2001:18) is all or part development of computer-based system by user. End user computing is adoption and using of information technology by a personal information system from outside the department to develop a software application in order support the work of the organization, and human as End User (Clarke, 2008:1522).

It can be concluded if the end user computing is adoption and using of information technology by personnel from outside the department information system is used to support operational applicant and managerial organization.

RESEARCH METHODE

Type of this research can be considered as the Explanatory Research with the hypothesis testing procedures for answer the questions and research objectives. According to McNabb (2008:100) "Explanatory research is the approach taken in most mainstream qualitative research. Its goal is to go beyond the traditional descriptive design of the positivist approach to provide meaning as well as description". So explanatory research is conducted provide explanations and description from the phenomena that was developed into the model. This research is usually looking at the phenomena and it can develop the new models to complement the research. Hypothesis testing to be done for proves that the hypothesis of the research could be justified and proven scientifically.

This research locate in the Perum Perhutani unit II KPH Pasuruan, Malang. at Kawi street no1 Malang. Subject population in the Perum Perhutani Unit II KPH Pasuruan, Malang that using the Computer is 75 Person and sample is a employee who work in Perum perhutani unit II KPH pasuruan, malang especially in part of PSDH that amount 30 person. PSDH (Forest Resource Processing) the part is a place to make all decision and use of computer is influence in this part, and also PSDH is the central of activity in Perum Perhutani because need a decision to make when, where and how to cut a trees and take a SAP activity.

Data Source and Technique of Data Collection

Data collection is an important step in process of business research because with getting the right data so the research will continue until to get answers from formulation of the problems that have been defined (Sawarno & Martadiredja, 2008:153) Technique of data collection is: Questionnaire, According to Kumar (2002:72) "Questionnaires are instruments that present information to a respondent in writing or through the use of pictures and then require a written response a check, a cycle, or word, a sentence, or several sentences".

The relevant Data collecting in the research has needed the best instrument and then will be formulated of the object generalization and eventually can achieve the research objectives. The research instrument is using a questionnaire. The questionnaire has questions in the form a multiple choice question that is kind of questions where respondents are asked to choose an answer from the various types of alternative answers. The objective of this questionnaire is to obtain data relevant to the purpose of the survey and to obtain valid and high reliabilities information.

Test of Data Instrument

1. Validity Test

Validity is related with the precision of measurement tools to do job in order achieve the target (Jogiyanto, 2008:164). If the score of each questions item have correlated significantly with the total score on a particular alpha level, if 5%, it can be said the tool is valid. The amount of respondents that I use as many as 30 people and obtained values of r table is 0,361.

r_{xy} =

r = Coefficient Correlation
n = Sample
x= item
y= total

2. Reliability Test

According to Jogiyanto (2008:164) Reliability indicates the accuracy and precision from measurement.

- if alpha > 0,90 so it is perfect Reliability
- if alpha Between 0,70 – 0,90 so it is high Reliability
- If alpha between 0,50 – 0,70 so Moderate Reliability
- if alpha < 0,50 So it is Low Reliability

=

= Cronbach's coefficient alpha
k = Amount of item / question
S_1 = Amount of variance score each item
St = Variance total

Multiple Regression Analysis

Multiple regression analysis is analyzed to the phenomenon which to indicate a causal relationship, where a dependent variable is determined by one or more independent variables.

Y= a+b1X1+b2X2+b3X3+…..+bnXn

Where:

Y : The value of independent between dependent variable
a : Constanta
b : Regression Coefficient
X : Independent Variable

Hypothesis Testing

1. F Test, Hypothesis testing is used for determine the effect of independent variables on the whole to Dependent Variable. This test is done by comparing the value F with value F table. According to Andren (2008:29) an F test is based on a test statistic that follows the F distribution. We would like to know if the model that we stated is equivalent to the null hypothesis, or if the alternative hypothesis is a significant improvement of the fit. Decision criteria are:
   a. If F > F table then H0 is rejected (no significant effect).
   b. If F < F table then H0 is accepted (no significant effect).
2. t Test, Hypothesis testing with "t test" is to look for "t" and compare with "t table", is an independent variable in Partial had a significant effect to the dependent variable. The formulation of the hypothesis in this test as follows:
   a. If t > t table then H0 is rejected (no significant effect)
   b. If t < t table then H0 is accepted (no significant effect.

RESULT AND DISCUSSION

Classic Assumption Test

On-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		30
Normal Parameters[a]	Mean	.0000000
	Std. Deviation	5.55175019
Most Extreme Differences	Absolute	.082
	Positive	.045
	Negative	-.082

Kolmogorov-Smirnov Z	.450
Asymp. Sig. (2-tailed)	.987

a. Test distribution is Normal.
Source:
Processed
Data, 2013

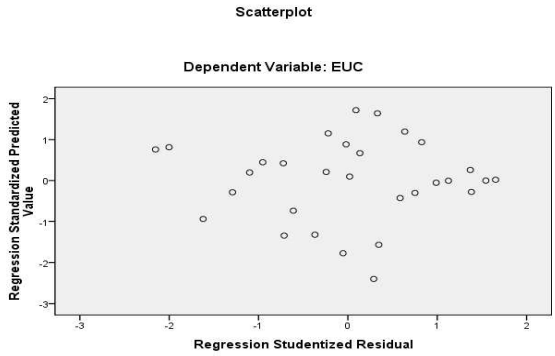
Kolmogorov-Smirnov test based on the Table, in get ρ-Value (Asymp. Sig. (2-tailed)) is 0. 987, where the value is greater than α = 0.05. Because significant value is greater than α = 0.05, can be concluded that the assumption of normality has been met, so that it can be stated if the regression model was fit for use.

Multicollinearity Test

Variable	Tolerance	VIF	Description
X1	0, 744	1, 344	Non muliticolinearity
X2	0, 728	1, 373	Non muliticolinearity
X3	0, 766	1, 305	Non muliticolinearity
X4	0, 824	1, 214	Non muliticolinearity

Linearity Testing on Multicollinearity test is result that the value of tolerance in all independent variable has a value > 0.1 and has a value of VIF <10, based on the result, it can be concluded if there is no multicollinearity between the independent variables.

Heteroscedasticity Test



Based on the picture it can be seen that the distribution and amount of data values in the respondents have passed the test of heteroscedasticity, namely the histogram image where the lines of normal curve are resembles a bell. Furthermore, the result of heteroscedasticity test is using scatter plots, can be seen scattered dots above and below zero on the Y axis in general, the Result of heteroskedstisitas test showed that the research data had homogeneous variety.

Autocorrelation Test

To test the variables are researched, namely whether there is autocorrelation or not, it can be used to test the Durbin-Waston (DW). Diagnosis of autocorrelation in the regression model is done by testing the value of Dubin-Waston.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.593[a]	.352	.248	5.979	2.114

a.Predictors: (Constant), Optimism, fear, Pessimism, Anticipation
b. Dependent Variable: EUC

From table above, the value of Durbin-Waston (DW) of 2,114 by looking at the DW is located between Du and (4-Du) or value 2.114 is between 1,750 (Du) and 2.250 (4-Du). (1,750 <2,114 <2,250). it can be said that in this research is no autocorrelation.

Multiple Linear Regression Analysis

This study uses multiple linear regression analysis method which aims to determine the influence of computer anxiety and computer attitude that consist variables of fear, anticipation, pessimism, and optimism to the end user computing employee's skill in the Perum Perhutani unit II KPH

Pasuruan, Malang especially in the employees who use a computer at PSDH section.

Model		Unstandardized Coefficients	Standardized Coefficients		
	B	Std. Eror	Beta	T	Sig.
(Constant)	10.569	17.900	.147	.590	.560
Fear	.328	.417	.479	.787	.439
Anticipation	1.038	.409	.149	2.539	.018
Pessimism	.416	.516	.231	.807	.427
Optimism	.558	.429		1.300	.206

The Anticipation variable is providing a positive and significant effect to the end user computing skills, that means if the Anticipation (X2) has increased, then the End User Computing Skill (Y) will also significant increase can be concluded, if fear increases end user computing skills variables will increase by 1, 038 and if pessimism (X3) has increased so end user computing skill also increase by 0, 416, and increased optimism variable (X4) will also increase in end user computing skill by 0,558

Hypothesis Test Results

Simultaneous Test (F test)

The F-test for the four independent variables and the dependent variable, the F test is amount 3,396 with F significance is 0,024 (<0.05) so that Ho is rejected. Reject is means if the hypothesis of variable fear, anticipation, and pessimism and optimism simultaneously to give effect to the end user computing skill variables are acceptable.

Partial test (t test)

The influence of fear, Anticipation, Optimism and Pessimism to end user computing skills based on partial calculations is known that the influence of fear has an positive effect to the end user computing skill significant level are
0, 05 (ρ <0, 05)

Research Discussion

Results of data analysis from 30 respondents of employees in the Perum Perhutani unit II KPH Pasuruan, Malang as the end user in this research, known that the independent variables consisting of fear (X1), anticipation (X2), Pessimism (X3), and Optimism (X4) together have an influence to the end user computing skill (Y). the level of influence simultaneously from four variables to end user computing skills can be seen from Square Adjusted value is 0, 248. Value indicates if each fear (x1), anticipation (X2), Pessimism (X3), and Optimism (X4) variables to contributed 24.8% to end user computing skills, while 75.2% were influenced by other variable not investigated in this study. the contributions Value which give is very weak, that is suggesting if in end user computing skills are not too bothered or affected by all the independent variables simultaneously to measure the end user computing skill.

Based on these results, the hypothesis about the influence of anticipation (X2) to the end user computing skill has been proven. but additionally, the third variable, hypothesis proved true well that there is also a positive effect of the variable fear (x1), Pessimism (X3), and Optimism (X4) although not significantly. Following the discussion of each variable:

Fear variables (X1)

Fear (X1) had an insignificant positive effect to the end user computing skill (Y), this study is not consistent with the research from Imroniah (2009), and inconsistency with previous results may be due to culture conditions and technological developments. Cultural conditions in previous studies assume that computers are still a luxury item and are still secondary needs so still high anxiety arises in their usage.

Anticipation variable (X2)

Anticipation (X2) has a significant positive effect on end user computing skills (Y), so the end user computing skill is influenced by variables significantly anticipation. The results also showed if anticipation variables (X2) has the most dominant effect to the end user computing skills (Y).

Pessimism variable (X3)

Pessimism (X3) had no significant positive effect to end user computing skills (Y), this study is not consistent with the research from Imroniah (2009), and inconsistency with previous results may be due to culture conditions and technological developments. Cultural conditions in previous studies assume the computer still a luxury item and secondary needs so arises high pessimism in their usage.

Optimism variable (X4)

Optimism (X4) had no significant positive effect to the end user computing skills (Y), the results of this study indicate if it is not always upbeat attitude has an influence on end user computing skills. Employees who feel optimistic tend to feel satisfied with the ability to control a computer so small tendency to increase our capabilities.

CONCLUSION AND SUGGESTION

Conclusion

Simultaneously testing it can be seen a positive effect between fear (X1), Anticipation (X2), Pessimism (X3), and Optimism (X4) variables to the End User Computing Skill (Y) it can be seen from the F equal to 3.396 with a F significance equal to 0.024 (p <0.05), Moreover, known the amount of the effect of four variables simultaneously to the End User Computing Skill (Y) as seen from Square adjusted value 0, 248 the value of indicates that fear of each variable (X1), anticipation (X2), Pessimism (X3), and Optimism (X4) contributed respectively by 24,8% to the End User Computing Skill. While 61.6% were influenced by other variables not examined in this study. Value of the contributions made is very weak, suggesting that the employees as end users don't too much attention to all variables of computer anxiety and computer attitude simultaneously to measure End User Computing Skill.

Partial testing showed that computer anxiety and computer attitude has an influence on user satisfaction with the regression model as follows:

Y = 10, 569 + 0, 328 X1 + 1, 038 X2 + 0, 416 X3 + 0, 558 X4

The standard constant value 10, 569 known if there is fear (X1), anticipation (X2), pessimism (X3), optimism (X4) variable then the amount of employees in the end user computing skill (Y) is equal to 10, 569.

There are variable anticipation as variable who has a influence dominant, proved to with has the coefficient beta highest that is 0.479 and t equal to 2, 539 as well as value of probability 0, 018 (p <0,05) based on these results, the hypothesis regarding the influence of computer anxiety and computer attitude to the EUC skills has been proven, that is dominant influence by variable anticipation. But on the other by a single variable, the variable of fear, optimism, pessimism is also a positive effect though not significantly.

Suggestion

1. Future studies should extend the object of research is not only at the level of the employee but developed to the domain manager and even better, that is developed based on inter-company owned Perhutani in eastern Java.
2. In a subsequent study should be more emphasis on pessimism and optimism variable and used as independent variables.
3. To further enhance the employee's skills in using a computer at the PSDH, Finance and other parts.

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